

## REMARKS

Claims 1–19 are pending. Claims 1–3, 6, 8, 9, 11–14, and 17 are amended.  
Claims 4, 5, 6, 10, 15, 16, 18, and 19 are canceled without prejudice or disclaimer.  
Claims 1 and 12 are independent.

**1. Support for Claim Amendments**

1.1. Regarding claim 1, support for the amendments can be found in the original specification at least on page 4, lines 1–5 and 24–26 and 33–35; page 3, lines 10–19 and 35; page 4, lines 25–30; and page 9, line 3; and in FIGs. 2–5. Therefore, the amendments do not constitute new matter.

**2. Rejections under 35 U.S.C. §103—Claims 1, 2, 5, 7–11, and 18**

2.1. The Examiner has rejected claims 1, 2, 5, 7–11, and 18 under 35 U.S.C. §103(a) as being unpatentable over Irwin (US 4, 978,952) in view of Parker (US 5,921,652). Applicants respectfully traverse for at least the reasons discussed herein below.

2.2. Regarding independent claim 1, the claim is amended to recite:

- 2.2.1. “a slab waveguide disposed behind the display”,
- 2.2.2. “the waveguide linearly tapered along a first axis of the display”,
- 2.2.3. and the waveguide “co-extensive with the first axis and a second axis of the display”,
- 2.2.4. “the waveguide comprising a thick edge and an opposing thin edge”,
- 2.2.5. “with an input wedge protruding directly from the thick edge”.

Amendment Responsive to 12–4–2009 Final Office Action  
Application Number: 10/559,891  
Attorney Docket Number: 324007.03

2.2.6. The Examiner alleges that Irwin teaches a “tapered waveguide” and, for support, cites Irwin, FIG. 2, item 20 (FOA, pg. 3, line 2). But Irwin’s “light guides 20” or “collimators” (col. 4, line 61) are arched or non-linearly tapered (see FIGs 2–4, 1, and 12) as opposed to “linearly tapered”, as recited in **claim 1**. Further, Parker teaches various forms of *light emitting panels* including “light emitting panel 60” illustrated in FIGs. 10 and 11. But Parker’s panels are not “linearly tapered”, as recited in **claim 1**. Accordingly, Irwin and Parker, considered separately and in combination, fail to disclose or suggest the combination of features recited in **claim 1**. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

2.2.7. Irwin discloses *light entry points* in the form of “lens surface 24” (col. 5, line 36; FIGs, 3 and 4) and “cut away area 82” (pg. 12, lines 7–10; FIG. 12). But Irwin’s two *light entry points* are both different than Applicants’ “input *linear wedge* protruding directly from the thick end of the wave guide”, as recited in **claim 1**, at least because neither of Irwin’s *light entry point* areas forms a “linear wedge”. In particular, the structure of Irwin’s two different *light guides* (FIG. 3, #20 and FIG. 12 #29) at the thick end includes surface 28, “a *convex parabolic... surface*” (col. 6, lines 16–17; FIGs. 3 and 12). Such light entry point areas including a *convex parabolic surface* are different than the “input linear wedge”, as recited in **claim 1**. Further, Parker also fails to disclose Applicants’ “input *linear wedge* protruding directly from the thick end of the wave guide”, as recited in **claim 1**. In particular, The “light emitting panel 60” of FIG. 10 includes “an off-axis light transition area 63... *that is thicker in cross section than the panel member [61]*” (col. 7, lines 52–57). This thicker area is further shown to have a *rounded nose* “to permit use of one or more light sources... that are dimensionally thicker than the light panel [60]” (col. 7, lines 57–60). Therefore, this area with a rounded nose that is thicker than the light emitting panel fails to disclose or suggest “an input *linear wedge*

protruding directly from the thick end of the waveguide”, as recited in **claim 1**. Further, FIG. 14 of Parker also fails to disclose the “linear wedge” recited in **claim 1**, but instead teaches an ‘L’ shaped “light emitting panel 80” with a “reflective or refractive surface 83... provided at the junction of the panel member 81 with the transition area 82” (col. 8, lines 29–31). Thus FIG. 14 also fails to disclose the recited *input linear wedge*, as does the remainder of Parker. Accordingly, Irwin and Parker, considered separately and in combination, fail to disclose or suggest the combination of features recited in **claim 1**. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

2.3. Regarding **claims 2, 5, 7–11, and 18**, **claims 4, 5, 7, and 10** are canceled without prejudice and disclaimer while **claims 2, 8, 9, and 11** depend from allowable **claim 1** and are therefore likewise allowable for at least the same reasons.

### 3. Rejections under 35 U.S.C. §103—Claims 12, 13, 16, and 19

3.1. The Examiner has rejected **claims 12, 13, 16, and 19** under 35 U.S.C. §103(a) as being unpatentable over Irwin in view of Parker and Sakaguchi (US 6,448,951).

Applicants respectfully traverse for at least the reasons discussed herein below.

3.2. Regarding independent **claim 12**, the Examiner has rejected **claim 12** for essentially the same reasons as **claim 1**, with the addition of the Sakaguchi reference. Sakaguchi teaches an “optical guide 18” that is not described in any detail in the written description (see col. 6, line 66–col. 7, line 2), but is shown in a wedge shape with a thick end and a thin end (see FIG. 4, #18). However, Sakaguchi fails to disclose an “*input linear wedge* protruding directly from the thick end of the wave guide”, as recited in **claim 12**. Irwin and Parker also fails to disclose the recited *input linear wedge* as

Amendment Responsive to 12–4–2009 Final Office Action  
Application Number: 10/559,891  
Attorney Docket Number: 324007.03

discussed in section 2.2.7 herein above with respect to **claim 1**. Accordingly, Irwin, Parker, and Sakaguchi, considered separately and in combination, fail to disclose or suggest the combination of features recited in **claim 1**. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

3.3. Regarding **claims 13, 16, and 19**, **claims 16 and 19** are canceled without prejudice and disclaimer while **claim 13** depends from allowable **claim 12** and is therefore likewise allowable for at least the same reasons.

#### 4. Rejections under 35 U.S.C. §103—Claim 3

4.1. The Examiner has rejected **claim 3** under 35 U.S.C. §103(a) as being unpatentable over Irwin in view of Parker and Wang (US 6,704,071). Applicants respectfully traverse and submit that Wang fails to overcome the deficiencies of Irwin and Parker with respect to **claim 1**, from which **claim 3** depends. Accordingly, **claim 2** is allowable over Irwin, Parker, and Wang for at least the same reasons discussed herein above with respect to **claim 1**. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

#### 5. Rejections under 35 U.S.C. §103—Claim 4

5.1. The Examiner has rejected **claim 4** under 35 U.S.C. §103(a) as being unpatentable over Irwin in view of Parker and Nauta (US 2002/0030772). The Examiner has rejected **claim 4** for essentially the same reasons as **claim 1**, with the addition of the Nauta reference. Nauta teaches that “light from lamp 12 is preferably coupled into the

Amendment Responsive to 12-4-2009 Final Office Action  
Application Number: 10/559,891  
Attorney Docket Number: 324007.03

waveguide 15 via coupling-in means 13, for example, by means of a wedge-shaped optical waveguide” (portion para [0030]). But waveguides 15 and 13 are separated with “liquid crystal shutter 21” disposed between them (see FIG. 1; para [0032]). Therefore, Nauta fails to disclose “an input linear wedge protruding *directly* from the thick end of the waveguide”, as recited in **claim 1**, because Nauta’s waveguides are separated. Therefore, Nauta fails to overcome the deficiencies of Irwin and Parker with respect to **claim 1**, from which **claim 4** depends. Accordingly, **claim 4** is allowable over Irwin, Parker, and Nauta for at least the same reasons discussed herein above with respect to **claim 1**. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

## 6. Rejections under 35 U.S.C. §103—Claim 6

6.1. The Examiner has rejected **claim 6** under 35 U.S.C. §103(a) as being unpatentable over Irwin in view of Parker and Higuchi (US 5,887,964). The Examiner has rejected **claim 6** for essentially the same reasons as **claim 1**, with the addition of the Higuchi reference. Higuchi teaches a “light guide plate 1” that is shown in a wedge shape with a thick end and a thin end (see FIGs. 1 and 4, #1). However, Higuchi fails to disclose an “*input linear wedge* protruding directly from the thick end of the waveguide”, as recited in **claim 1**. Accordingly, Higuchi fails to overcome the deficiencies of Irwin and Parker with respect to **claim 1**, from which **claim 6** depends. Accordingly, **claim 6** is allowable over Irwin, Parker, and Higuchi for at least the same reasons discussed herein above with respect to **claim 1**. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

Amendment Responsive to 12-4-2009 Final Office Action  
Application Number: 10/559,891  
Attorney Docket Number: 324007.03

**7. Rejections under 35 U.S.C. §103—Claim 14**

7.1. The Examiner has rejected **claim 14** under 35 U.S.C. §103(a) as being unpatentable over Irwin in view of Parker, Sakaguchi, and Wang. Applicants respectfully traverse and submit that Wang fails to overcome the deficiencies of Irwin, Parker, and Sakaguchi with respect to **claim 12**, from which **claim 14** depends. Accordingly, **claim 14** is allowable over Irwin, Parker, and Wang for at least the same reasons discussed herein above with respect to **claim 12**. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

**8. Rejections under 35 U.S.C. §103—Claim 15**

8.1. The Examiner has rejected **claim 15** under 35 U.S.C. §103(a) as being unpatentable over Irwin in view of Parker, Sakaguchi, and Nauta. **Claim 15** is canceled without prejudice or disclaimer. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

**9. Rejections under 35 U.S.C. §103—Claim 17**

9.1. The Examiner has rejected **claim 17** under 35 U.S.C. §103(a) as being unpatentable over Irwin in view of Parker, Sakaguchi, and Higuchi. The Examiner has rejected **claim 17** for essentially the same reasons as **claim 12**, with the addition of the Higuchi reference. Higuchi teaches a “light guide plate 1” that is shown in a wedge

Amendment Responsive to 12-4-2009 Final Office Action  
Application Number: 10/559,891  
Attorney Docket Number: 324007.03

shape with a thick end and a thin end (see FIGs. 1 and 4, #1). However, Higuchi fails to disclose an “*input linear wedge* protruding directly from the thick end of the waveguide”, as recited in **claim 12**. Accordingly, Higuchi fails to overcome the deficiencies of Irwin, Parker, and Sakaguchi with respect to **claim 12**, from which **claim 17** depends. Accordingly, **claim 17** is allowable over Irwin, Parker, and Higuchi for at least the same reasons discussed herein above with respect to **claim 12**. Therefore, Applicants respectfully request that the Examiner withdraw the rejection.

Amendment Responsive to 12-4-2009 Final Office Action  
Application Number: 10/559,891  
Attorney Docket Number: 324007.03

CONCLUSION

Accordingly, in view of the above Amendments and Remarks it is submitted that the claims are patentably distinct over any cited art and that all the rejections to the claims have been overcome. Based on the foregoing, Applicants respectfully request that the pending claims be allowed, and that a timely Notice of Allowance be issued in this case. If the Examiner believes, after this Amendment, that the Application is not in condition for allowance, the Examiner is requested to call the Applicants' representative at the telephone number listed below.

Amendment Responsive to 12-4-2009 Final Office Action  
Application Number: 10/559,891  
Attorney Docket Number: 324007.03



**AMENDMENT**

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time.

Respectfully submitted,  
Microsoft Corporation

Date: 3-1-2010

By: /L. Alan Collins/

L. Alan Collins, Reg. No.: 57,646  
Microsoft Corporation  
One Microsoft Way  
Redmond WA 98052-6399  
Telephone: (425) 707-9382

**CERTIFICATE OF MAILING OR TRANSMISSION**  
**(Under 37 CFR § 1.8(a)) or ELECTRONIC FILING**

I hereby certify that this correspondence is being electronically deposited with the USPTO via EFS-Web on the date shown below:

3-1-2010  
Date

/L. Alan Collins/  
L. Alan Collins

Amendment Responsive to 12-4-2009 Final Office Action  
Application Number: 10/559,891  
Attorney Docket Number: 324007.03